

Kit's Coding Adventure: Building Algorithms

Learning objective: To understand that an algorithm is a set of step-by-step instructions and to identify the importance of order in a sequence.

Kit the fox is learning to code. Coding is just giving a computer clear instructions. Help Kit complete his tasks by following these steps. Use the word bank to help you write your answers.

Word bank: algorithm · sequence · debug · instruction · order

1. Kit needs to make a sandwich. An algorithm is a list of steps. Write the steps to make a jam sandwich in the correct order using numbers 1 to 3. (3 marks)

2. What do we call a set of clear instructions that tells a computer what to do? (1 mark)

3. Kit's robot moved left instead of right. What do we call it when we find and fix a mistake in our instructions? (1 mark)

4. Why is it important to put your instructions in the right order? (Sentence starter: If the order is wrong, then...) (2 marks)

Draw: Draw a simple path for a robot to follow from a start point to a finish point. Use arrows to show the direction the robot should move.

Extension challenge: Imagine you are teaching a friend how to brush their teeth. Write down two instructions you would give them to make sure they do it in the right sequence.